

## **Appendix G**

### **Threatened and Endangered Species Report Summary**

## M-15 DEIS

### Threatened and Endangered Species Report Summary

The Biology/Threatened and Endangered Species Report, provided under separate cover, is a companion document to the Draft Environmental Impact Statement (DEIS) prepared for the M-15 project between I-75 and I-69 in Oakland and Genesee counties.

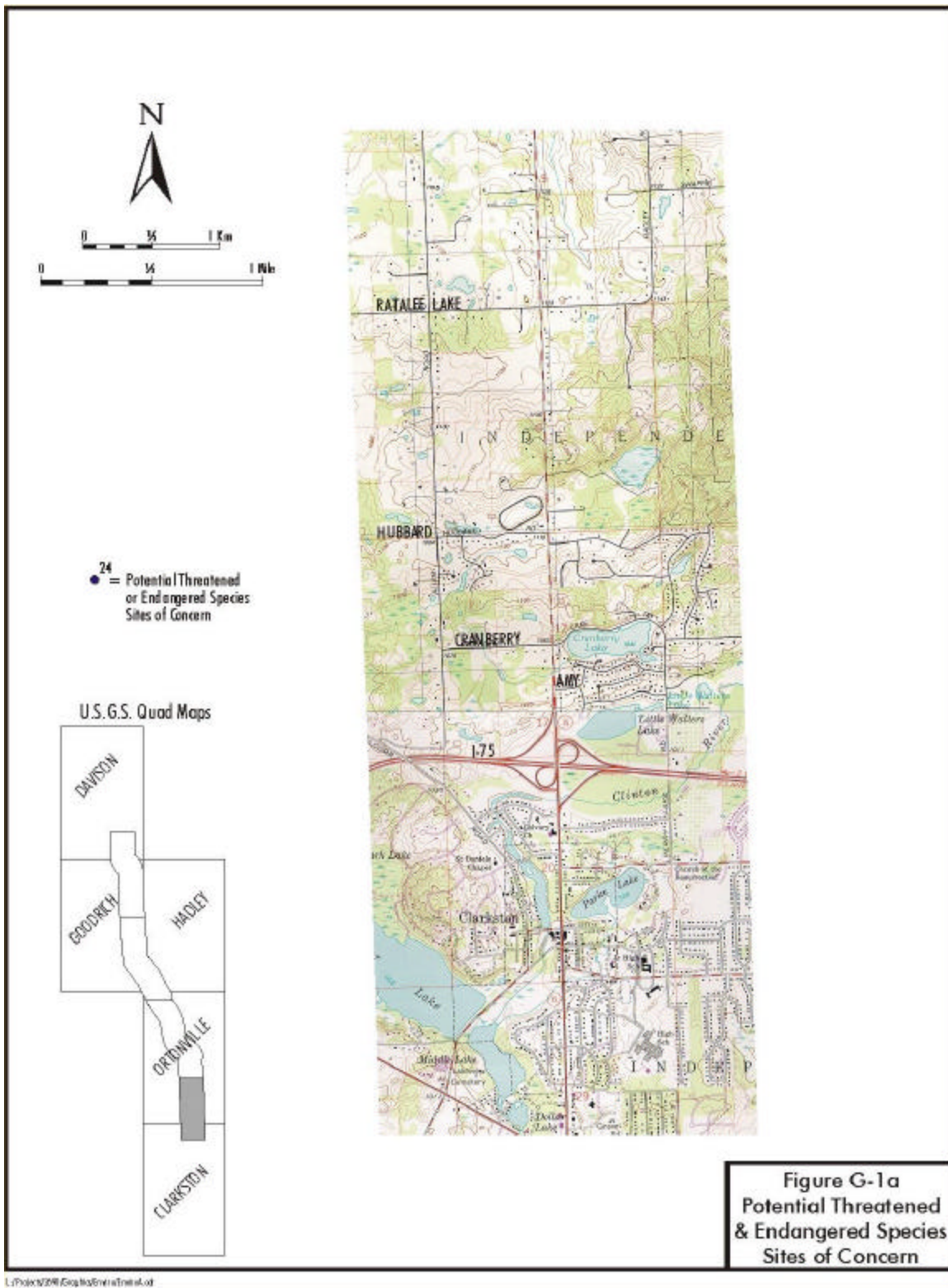
An investigation for listed species (that is, threatened, endangered, or state special concern) was conducted during two periods August 14 to 18, 2000 and May 14 to 18, 2001. Because the proposed project calls for reconstruction of the current M-15 alignment, the specific area investigated during this biological survey was a linear strip that paralleled the highway right-of-way (ROW) to a width of approximately 200 feet for plants, and up to 500 feet for wildlife or wildlife habitats. Urban areas, suburban yards, and actively farmed areas were not investigated because none of the listed species was identified as using these habitats.

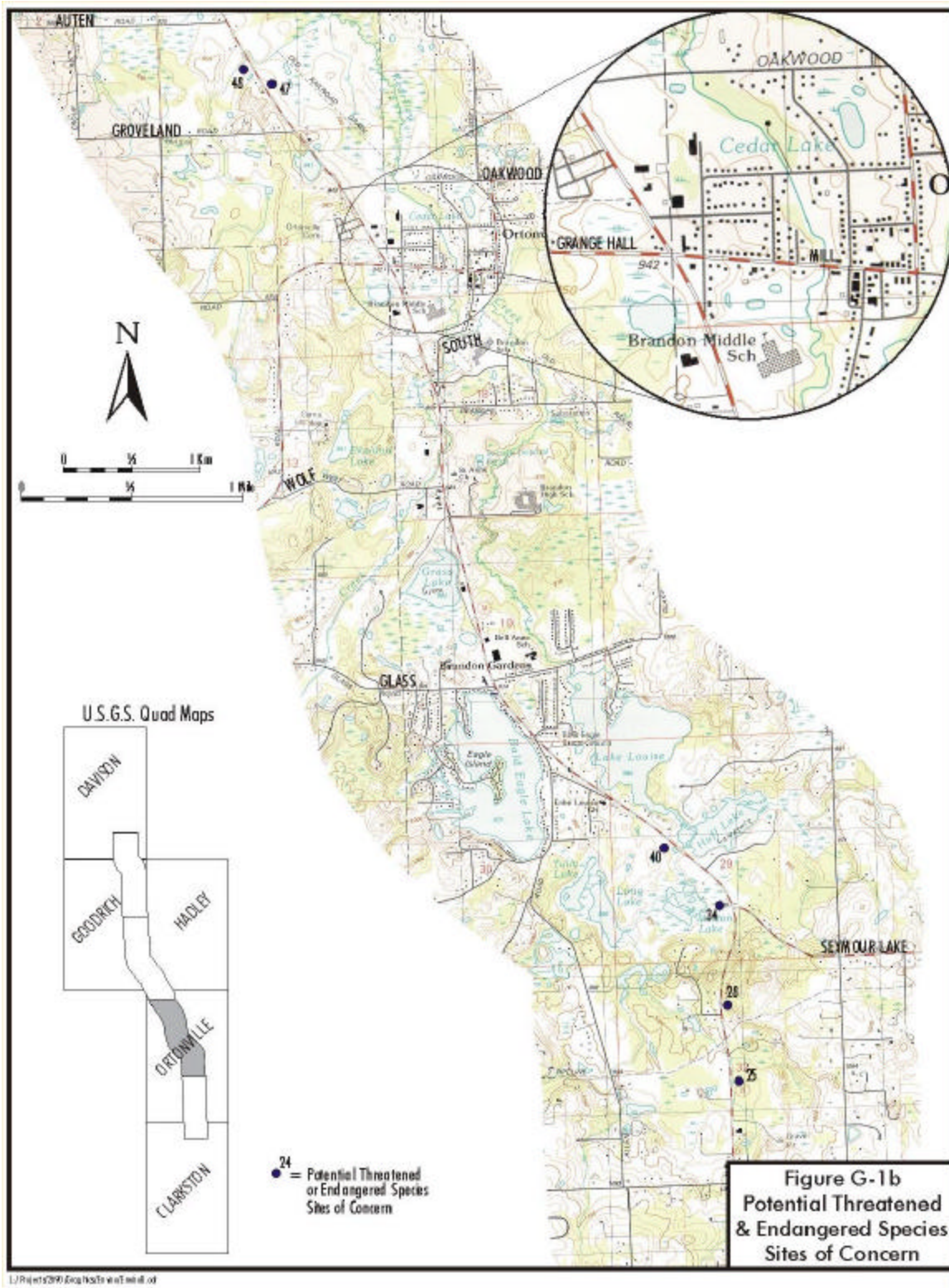
No federally threatened or endangered plant or animal species was identified within the study area. State-listed species found were: the red mulberry (Site 34, state special concern); the plant species wahoo (Sites 25 and 28, state special concern); Blanding's turtle (Site 40, state special concern); and, the spotted turtle (Sites 47 and 48, state threatened).

The Preferred Alternative consists of a blend of roadway types of varying widths. In many areas, a narrower roadway type was used and/or the alignment was shifted to avoid or minimize impacts to wetlands and to habitats containing listed plant and animal species. The resultant Preferred Alternative represents a practicable effort to meet future traffic capacity needs, provide a safe road, and cause the least impact to the social and natural environments.

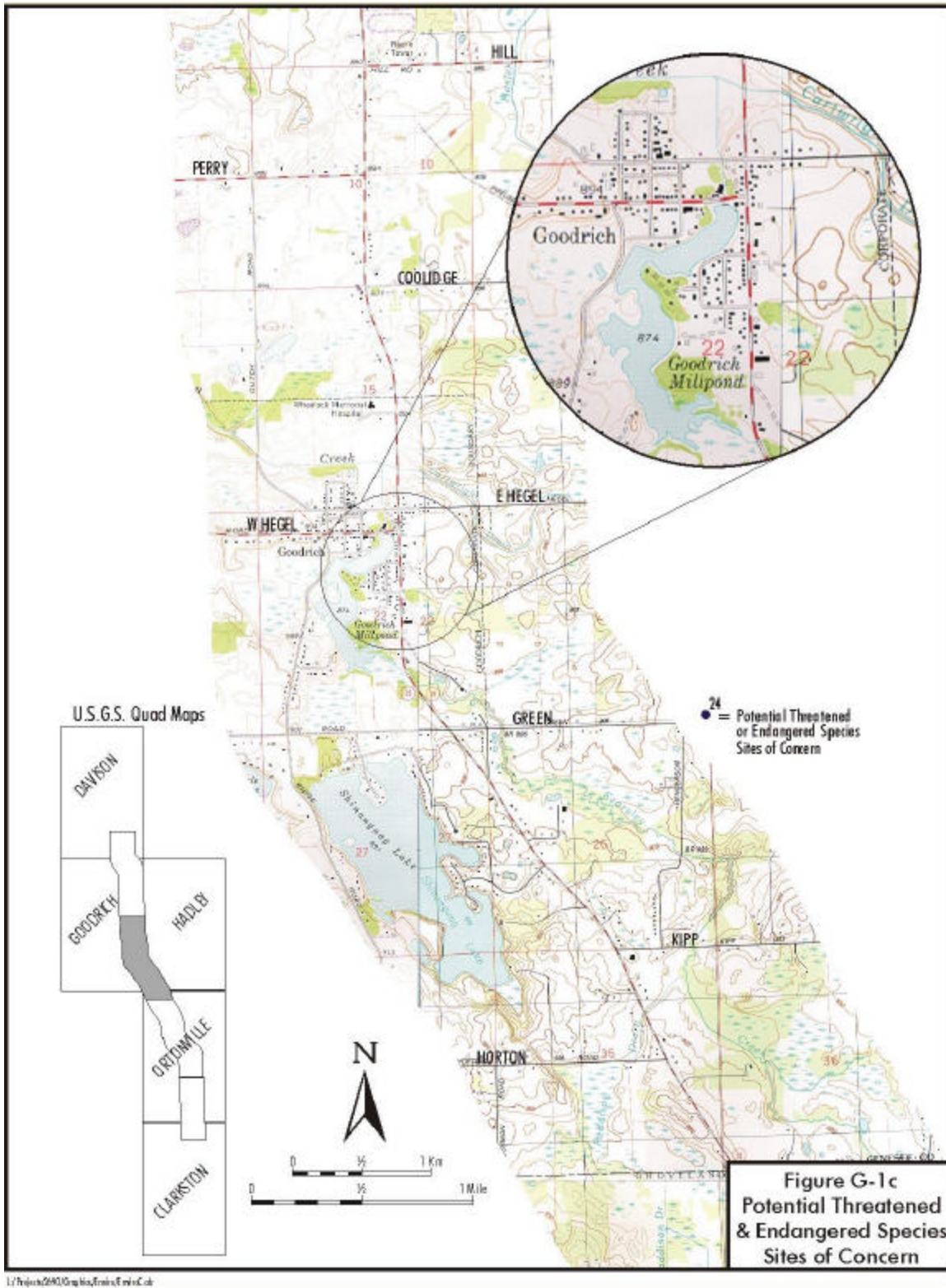
The relationships of the sites of concern to the Preferred Alternative are listed below (Figure G-1 and Table G-1):

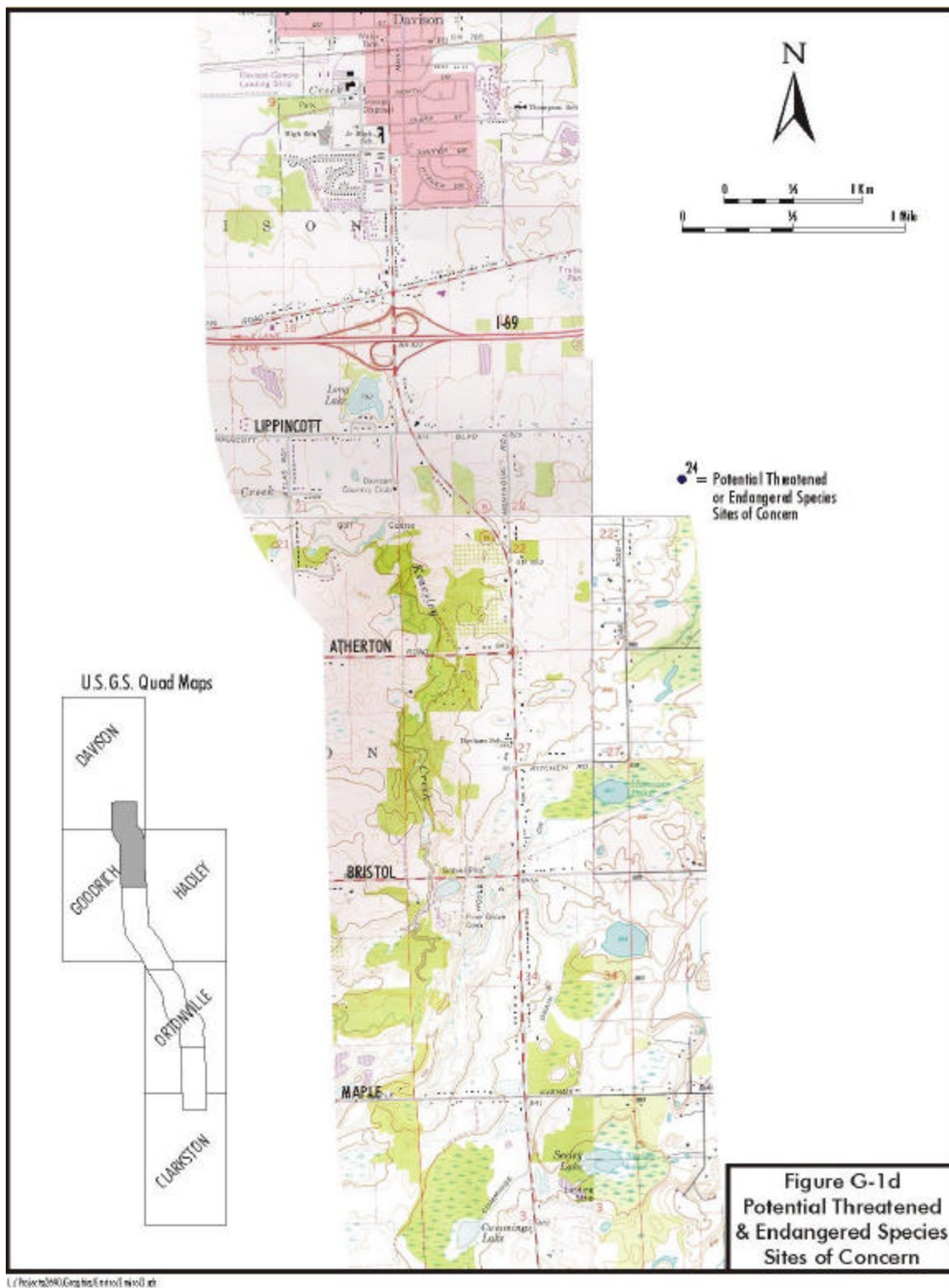
- **Site 25 - site avoided** (wahoo, *Euonymus atropurpurea*, state special concern).
- **Site 34 – site avoided** (red mulberry, *Morus rubra*, state special concern). The proposed alignment would not likely affect this species because of its distance from the existing alignment and its location within a wetland area to be avoided.
- **Site 40 – site avoided** (Blanding's turtle, *Emydoidea blandingii*, state special concern).
- **Site 47 – habitat avoided** (spotted turtle, *Clemmys guttata*, state threatened). Preferred habitat for the spotted turtle at Site 47 is removed from the road by 200 feet and will not likely be affected. This section, between Groveland Road and Auten Road was recognized as a high-quality wetland area. Consequently, the cross section of the Preferred Alternative was minimized to a very narrow boulevard with a 120-foot right-of-way width. The proposed alignment is centered on existing M-15, as the wetlands exist on both sides of M-15. Approximate right-of-way needs are 1.45 acres on the east (Site 47) and 0.34 acres on the west (Site 48, see below).
- **Site 48 – habitat avoided** (spotted turtle, *Clemmys guttata*, state threatened). Approximate right-of-way needs are 0.34 acres on the west (Site 48), but preferred habitat for the spotted turtle at Site 48 is removed from the road by 300 feet and will not likely be affected.
- **Site 28 – affected** (wahoo, *Euonymus atropurpurea*, state special concern). The proposed alignment was shifted to the east side of M-15 into Site 28 to avoid impacts to the wetland habitat of Site 34, north of Site 28. At Site 28, additional right-of-way of approximately 50 feet (0.05 acres) is proposed.











In summary, a very small section of Site 28 (0.05 acres), which contains the wahoo will be affected. Sections of Sites 47 and 48 will be affected, but the preferred habitat for the spotted turtle at both sites is distant from the road and would not likely be affected.

**Table G-1**  
**Potential Threatened or Endangered Species and Species of Special Concern**  
**(Sites Shown on Figure G-1)**

Site #	Avoided/Affected	Species	Listing Status
Site 25	Site avoided	Wahoo, <i>Euonymus atropurpurea</i>	State special concern
Site 28	Site affected	Wahoo, <i>Euonymus atropurpurea</i>	State special concern
Site 34	Site avoided	Red mulberry, <i>Morus rubra</i>	State special concern
Site 40	Site avoided	Blanding's turtle, <i>Emydoidea blandingii</i>	State special concern
Sites 47 & 48	Site affected, but turtle habitat avoided	Spotted turtle, <i>Clemmys guttata</i>	State threatened

Source: V3 Consultants, Inc.